

IN THE CLAIMS:

Please amend claims 27-29, 37-39, 47, and 52.

This listing of claims will replace all prior versions, and listings of the claims in the application.

Listing of the claims

1-23. **(Canceled)**

24. **(Previously Presented)** A method of treating an individual who has metastasized colorectal cancer comprising the step of administering to such an individual a therapeutically effective amount of a vaccine comprising a nucleic acid molecule that encodes a protein comprising at least one epitope of human guanylyl cyclase C protein.

25. **(Previously presented)** A method of treating an individual who has been identified as being susceptible to metastasized colorectal cancer comprising the step of administering to such an individual a prophylactically effective amount of a vaccine comprising a nucleic acid molecule that encodes a protein comprising at least one epitope of human guanylyl cyclase C protein.

26. **(Previously presented)** The method of claim 24 wherein said protein comprises an epitope of the extracellular domain of the human guanylyl cyclase C protein.

27. **(Currently Amended)** The method of claim 24 A method of treating an individual who has been identified as being susceptible to metastasized colorectal cancer comprising the step of administering to such an individual a prophylactically effective amount of a vaccine comprising a nucleic acid molecule that encodes a protein, wherein said protein comprises the extracellular domain of the human guanylyl cyclase C protein.

28. **(Currently Amended)** The method of claim [[24]] 27 wherein the protein comprises the human guanylyl cyclase C protein.

29. **(Currently Amended)** The method of claim [[24]] 27 wherein the protein consists of the human guanylyl cyclase C protein.

30. **(Previously presented)** The method of claim 24 wherein the nucleic acid molecule that encodes said protein is within an infectious agent.

31. **(Previously presented)** The method of claim 24 wherein the nucleic acid molecule that encodes said protein is within a viral vector.

32. **(Previously presented)** The method of claim 31 wherein said viral vector is a recombinant vaccinia virus.

33. **(Previously presented)** The method of claim 31 wherein said viral vector is a recombinant adenovirus virus.

34. **(Previously presented)** The method of claim 24 wherein the nucleic acid molecule that encodes said protein is within a bacterial cell.

35. **(Previously presented)** The method of claim 24 wherein the nucleic acid molecule that encodes said protein is a plasmid.

36. **(Previously Presented)** The method of claim 25 wherein said protein comprises an epitope of the extracellular domain of the human guanylyl cyclase C protein.

37. **(Currently Amended)** The method of claim 25 A method of treating an individual who has been identified as being susceptible to metastasized colorectal cancer comprising the step of administering to such an individual a prophylactically effective amount of a vaccine comprising a nucleic acid molecule that encodes a protein, wherein said protein comprises the extracellular domain of the human guanylyl cyclase C protein.

38. **(Currently Amended)** The method of claim [[25]] 37 wherein the protein comprises the human guanylyl cyclase C protein.

39. **(Currently Amended)** The method of claim [[25]] 37 wherein the protein consists of the human guanylyl cyclase C protein.

40. **(Previously presented)** The method of claim 25 wherein the nucleic acid molecule that encodes said protein is within an infectious agent.

41. **(Previously presented)** The method of claim 25 wherein the nucleic acid molecule that encodes said protein is within a viral vector.

42. **(Previously presented)** The method of claim 41 wherein said viral vector is a recombinant vaccinia virus.

43. **(Previously presented)** The method of claim 41 wherein said viral vector is a recombinant adenovirus virus.

44. **(Previously presented)** The method of claim 25 wherein the nucleic acid molecule that encodes said protein is within a bacterial cell.

45. **(Previously presented)** The method of claim 25 wherein the nucleic acid molecule that encodes said protein is a plasmid.

46. **(Previously presented)** The method of claim 25 wherein the individual has been previously been diagnosed with colorectal cancer.

47. **(Currently Amended)** The method of claim [[24]] 27 wherein said protein comprises SEQ ID NO:2 or a fragment thereof comprising at least one epitope of amino acids 24-454 of SEQ ID NO:2.

48. **(Previously presented)** The method of claim 47 wherein said protein comprises SEQ ID NO:2.

49. **(Previously presented)** The method of claim 47 wherein said protein is at least one epitope of amino acids 24-454 of SEQ ID NO:2.

50. **(Previously presented)** The method of claim 49 wherein said protein comprises amino acids 24-454 of SEQ ID NO:2.

51. **(Previously presented)** The method of claim 49 wherein said protein comprises amino acids 24-475 of SEQ ID NO:2.

52. **(Currently Amended)** The method of claim [[25]] 37 wherein said protein comprises SEQ ID NO:2 or a fragment thereof comprising at least one epitope of amino acids 24-454 of SEQ ID NO:2.

53. **(Previously presented)** The method of claim 52 wherein said protein comprises SEQ ID NO:2.

54. **(Previously presented)** The method of claim 52 wherein said protein is at least one epitope of amino acids 24-454 of SEQ ID NO:2.

55. **(Previously presented)** The method of claim 54 wherein said protein comprises amino acids 24-454 of SEQ ID NO:2.

56. **(Previously presented)** The method of claim 54 wherein said protein comprises amino acids 24-475 of SEQ ID NO:2.